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ABSTRACT

A 9-month naturalistic study of 16 preschoolers' classroom literacy behaviors and a related study of one student's literacy activities at home examined book-related dramatic play as an important part of the children's literacy interactions. Analyses of instances where play was related to the meanings of the books the children had read indicated that each instance of book-related dramatic play could be described in terms of 6 properties: (1) children's purposes for play; (2) the perspective or point of view explored; (3) the type of intertextual ties constructed between books and playscripts; (4) the sign systems used and their relation to book reading events; (5) the kinds of social interaction involved; and (6) the scope of play. Results indicated that the children created direct linkages between their book and play experiences. Further, the data support the hypothesis that book-related dramatic play is much more than a context for literacy learning--it appeared to be a part of the process of comprehending books, expressing reactions, experiencing books in affective and kinesthetic ways, and participating in literacy events. Book-related play also served as a means of inquiry and as a connecting link between the child's world and the adult one. Play provided a relatively risk-free environment for exploration of books through an open, child-directed agenda, and offered an array of possible tools for exploration and expression. (Contains 3 tables of data, 8 examples, and 77 references.) (Author/CR)

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THE LITERATE POTENTIALS OF BOOK-RELATED DRAMATIC PLAY

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THE LITERATE POTENTIALS OF BOOK-RELATED DRAMATIC PLAY

Abstract

In a 9 month naturalistic study of 16 preschoolers' classroom literacy behaviors and a related study of one of the students' literacy activities at home, book-related dramatic play was observed to be an important part of the children's literacy interactions. Analyses of instances where play was related to the meanings of the books the children had read indicated that each instance of book-related dramatic play could be described in terms of six properties including: (a) children's *purposes* for play, (b) the *perspective* or point of view explored, (c) the type of *intertextual ties* constructed between books and playscripts, (d) the *sign systems* used and their relation to book reading events, (e) the kinds of *social interaction* involved, and (f) the *scope* of play. Analyses demonstrate that the children created direct linkages between their book and play experiences. Further, the data support the hypothesis that book-related dramatic play is much more than a *context* for literacy learning. For the children participating in this study, it appeared to be a part of the process of *comprehending* books, *expressing* one's reactions, *experiencing* books in affective and kinesthetic ways, and *participating* in literacy events. Book-related play also served as a means of *inquiry* and as a *connecting link* between the child's world and the adult one represented by books and the book reading events in which they were embedded. Play provided a relatively risk free environment for exploration of books through an open, child-directed agenda, and offered an array possible tools for exploration and expression (*e.g.*, the multiple sign systems associated with drama.)

THE LITERATE POTENTIALS OF BOOK-RELATED DRAMATIC PLAY

Dramatic play, (also known as sociodramatic, symbolic, pretend, fantasy, imaginative, and make-believe play), is a central mode through which young children experience their world. Through dramatic play, children try out social roles and explore the meanings of events within pretend scenarios that they invent and control (Corsaro, 1982). Though data addressing the actual frequency of play is limited both by the small number of studies and by the methodology used, existing research estimates that 2- and 3-year-olds spend somewhere between 10 and 20 percent of their time engaged in dramatic play (Doyle & Dale, 1984; Haight & Miller, 1993; Miller & Garvey, 1984). Because of its pervasiveness, dramatic play is the type of play that has received the most attention among researchers interested in the connections between play and literacy learning (Christie, 1991).

At present there are three main lines of research investigating the connection between dramatic play and literacy -- each differing in focus. In one line of research, educational researchers interested in emergent literacy development (e.g., Hall, 1987; Newman & Roskos, 1991; Vukelich, 1991) have used naturalistic observations to describe the ways children take on the literate roles of readers and writers during dramatic play. This work suggests that dramatic play serves as an important arena for children's exploration of the *processes and purposes* for reading and writing, and draws attention to the curricular potentials of creating literacy-rich play contexts. A second line of research, rooted in psychology, has also concerned itself with the ways that play may enhance children's literacy *processes*. Here researchers (e.g., Pellegrini & Galda, 1991; Galda, Pellegrini, & Cox, 1989; Dickinson & Moreton, 1991) have explored the global relationship between the basic representational abilities used in play, reading, and writing by correlating measures of representational ability in play and literacy settings. A third line of research rooted in cognitive psychology has investigated the role of dramatic play in children's comprehension of literate *content* -- especially the comprehension and recall of stories. Through experiments and observation of children in researcher-controlled play events (e.g., Christie, 1983; Saltz, Dixon, & Johnson, 1977; Pellegrini & Galda, 1982; Silvern, Williamson, & Waters, 1983), these researchers conclude that dramatic play is related to comprehension in powerful, if complex, ways.

While existing research presents important insights concerning the relation between play and literacy learning, this work has focused on two types of play contexts: child-directed enactments of literate roles, and teacher-directed enactments of stories. In this paper, I report analyses of data from a third type of play situation that emerged as an important focus during the course of two related, naturalistic studies of young children's literacy learning: book-related, dramatic play spontaneously initiated and directed by children. For the purposes of this paper, I define *book-related dramatic play* as dramatic play that reflects either explicitly or implicitly the *meanings* signed in book text or illustrations, or in the book-reading events in which children encounter books. The analyses reported in this paper address two broad research questions related to the play-literacy connection : (a) What kinds of book-related play do young children engage in at school and at home? and (b) What is the function of book-related dramatic in the children's exploration of the *meanings* of books?

In order to more thoroughly situate the present study in relation to existing lines of investigation in the fields of education and cognitive psychology, I first provide definitions of dramatic play, and then briefly review relevant aspect of related research.

Dramatic Play: Defining Characteristics

Most adults who have spent time with young children easily recognize episodes of dramatic play (Rubin, 1988). Typical examples include a child pretending to rock a doll to sleep, or a group of children taking on the roles of their favorite TV characters and acting out a story. While it is relatively easy to get agreement among adults in their judgments of play versus non-play activities, it has proved more difficult to create an acceptable definition of play. To date, most researchers have identified sets of characteristics that differentiate play from other types of behaviors (Christie, 1991; Rubin, 1988; Rubin, Fein, & Vandenberg, 1983; Neumann, 1971; Spodek, Saracho, & Davis, 1987). Though these lists differ in some particulars, Christie's set of characteristics captures the key features addressed by most researchers. He suggests that play is characterized by 6 properties. First, it is *non-literal*. In play , internal reality takes precedence over external reality. Children invent new meanings for real world objects, and roles are transformed in line with child-generated play scenarios. Second, in play *means are more important than ends*. When children play, their attention is focused most strongly on the activity itself, rather than an end-product. Third, play is marked by *positive affect*.

Children usually show signs of enjoyment when they play. Fourth, play is *flexible*. During play, children are likely to experiment with novel combinations of ideas and actions. Fifth, play is *voluntary*. Children identify spontaneous child-selected activities as play. Sixth, play involves *internal control* by the players. When playing, children themselves direct the course of events, rather than following adult directions. Rubin (1988) further points out that in play children invent their own rules as they go along, rather than following established guidelines for a certain type of play or game.

Using these characteristics, a number of types of play have been identified by researchers. These include dramatic play, constructive play, exploratory play, and practice play. Dramatic play was the most commonly observed type of play in the studies reported in this paper, and, thus, is most central to the present discussion. Most researchers agree that a central characteristic of dramatic play is the "assimilative manipulation of symbols" (Rubin, Fein, & Vandenberg, 1983, p. 700); that is, when involved in dramatic play, children use make-believe transformations of objects and role-playing to act out scripts and stories they invent (Christie, 1991). In dramatic play, children pretend "as if" real world objects and people had other identities. In contrast, constructive play consists of the self-regulated creation of a product as a solution to a particular problem. Exploratory play involves children in acting on objects, people, and social situations to experiment with their reactions. Older children engage in practice play with materials or movements to develop coordinated motor skills (Bergen, 1988).

Dramatic Play and the Emergence of Literacy

As briefly outlined in the opening section of this paper, research on the connection between young children's dramatic play and the emergence of literacy is rooted in the field of educational research on language/literacy learning and in cognitive psychology. Each field has its own theoretical presumptions about the connections between play and literacy, as well as a set of related research foci and methods.

Educational research. A number of early literacy researchers (e.g., Hall, 1987; Newman & Roskos, 1991; Vukelich, 1991) have investigated children's dramatic play with literacy-related objects such as writing and reading materials. One guiding premise for this work is that *dramatic play provides a natural opportunity for children to develop hypotheses about the functions of print within*

play settings they control and develop. A second premise, is that as children proceed to read and write in contextualized situations, they will develop and refine hypotheses about literacy processes (Hall, 1991). Given this background, there has been considerable interest by educational researchers in developing literacy-enriched play centers (Neuman & Roskos, 1991; Morrow & Rand, 1991) where literacy props are included as part of themed dramatic play centers. For example, in an "office" play center, children might be provided with paper, envelopes, stamps, pens, appointment books, phone books, and calendars, and then be invited to "play office" by creating their own playscripts related to activities in an office. The research methodology used in these studies has included both long-term observations of children's reading and writing behaviors in literacy-enriched play centers, and experimental work investigating the effects of various aspects of the play contexts themselves.

The present study shares with this work *naturalistic* methods of observing and recording play behavior in home and school contexts, and an interest in children's self-initiated play. However, the focus of the work reported here is somewhat different. Unlike the studies cited above, the data collected in this study, do not lead to a focus on children's incorporation of reading and writing into their pretend roles. While the young children observed for the present studies did sometimes read or write as part of a role in dramatic play, a much more frequent pattern was their creation of connections between dramatic play and the *meanings* encountered in books. For this reason, this paper focuses on the ways children used play as a means of comprehending and responding to books.

Psychological research. Two additional lines of research rooted in psychology have explored the play/literacy connection. The first explores the global link between play and general cognitive abilities needed for reading and writing, and the second investigates more specific links between dramatic play and story comprehension.

Though Piaget's (1962,1970) and Vygotsky's (1978) theories concerning the role of dramatic play in cognitive development are quite different (Pellegrini & Galda, 1993), each has provided an important impetus for research based on the general premise that *dramatic play is an arena for developing general representational skills that are eventually transferred to other domains, including reading and writing* (Pellegrini & Galda, 1991). Vygotsky, in particular, suggests that the ability to make abstract transformations of objects and roles in play (e.g., pretending a block is a car) eventually

becomes transformed into the ability to use written words, which are themselves abstract signs for objects and ideas. Thus, he contends that in dramatic play, children come to experience and, eventually, understand representation as a process. Children develop the ability to dissociate meanings and objects, and flexibly associate signs with their referents. For example, in play children learn that they can arbitrarily decide that a piece of wood (i.e., a building block) will be used to represent a car, a person, or any other object. The meaning of the block is not fixed or inherent in the object, but instead lies in the sign or meaning associated with it by the child. Such understandings eventually allow children to make use of socially defined signs (i.e., written words) to represent meanings. Peirce (1966) and other semioticians (e.g., Eco, 1976) have taken this argument a step further when they point out that while there are general social agreements about the meanings of written words, these and all signs remain open to interpretation. From such a perspective, dramatic play and writing require similar abilities to make abstract transformations that link objects and meanings. Both sign systems also require the use of language to verbally explain these transformations. In dramatic play, children explicitly use talk to negotiate roles and the identity of objects (e.g., "No! You're the Mom, and I'm the baby!"). In writing, children are required to use metalinguistic language such as *word*, or *letter* to talk about and justify their own and other authors' uses of written signs. Children become metacognitively aware of the features of the sign systems because of the need to negotiate with the others the meanings of their play or writing.

Growing from this theoretical claim regarding the general links between dramatic play and literacy learning is a second line of psychological research that investigates the extent to which specific dimensions of dramatic play (e.g., abstract transformations or metalinguistic verbs) are related to measures of emergent literacy learning (Galda, Pellegrini, & Cox, 1989; Pellegrini & Galda, 1991). While a comprehensive review of the outcomes of these studies is beyond the scope of this paper, in general, researchers have found positive relationships between dramatic play and literacy behaviors (Pellegrini & Galda, 1991, 1993). At the same time, they have raised a number of important questions regarding developmental changes in this relationship as children grow older, and about which aspects of dramatic play (e.g., transformations, metacommunication about play) are most strongly related to literacy learning.

In the present context, it is important to note that while these studies provide insights into the general relationship between dramatic play and literacy learning, they do not directly focus on *literacy-related* play (Hall, 1991). Researchers either record samples of dramatic play in "natural" contexts such as classroom dramatic play areas (Pellegrini & Galda, 1991), or record children's pretend play with researcher-provided sets of objects (Wolfgang, 1974). The goal of these studies remains recording a sample of dramatic play, and then correlating it with children's behaviors in separate contexts designed to elicit literacy behavior. Such studies have played an important role in suggesting refinements of global theories regarding the link between dramatic play and literacy learning, but stop short of investigating more direct relationships between play and literacy.

Experimental research into the effects of play training has more directly addressed the causal connection between play and literacy learning. Of particular interest for the present study is research investigating the impact of dramatic play on story comprehension. In general, the premise behind these studies is that *dramatic story reenactments provide opportunities for mental reconstructions of story events and the development of story schemas*, both of which are posited to increase story comprehension (Williamson & Silvern, 1991). Though a variety of types of play training have been used, Smilansky's (1968) sociodramatic play training and Saltz and Johnson's (1974) thematic fantasy play training have been most widely adapted.

In sociodramatic play training (Smilansky, 1968), teachers may either join ongoing play or initiate new play episodes. In addition, they may intervene from both outside and inside the play. Outside intervention involves teachers in addressing comments and questions to children in their assumed play roles, providing theme-related props, and suggesting play themes and activities. Inside intervention involves teachers in entering the children's play by taking on a role. This allows adults to model desired play behaviors. The aim of both inside and outside interventions is to encourage children to engage in dramatic play that incorporates role-playing, object transformations, and social interaction. While negotiating play events with children, teachers often exert at least partial control over the course of play.

Other studies have used a more structured form of play training -- the thematic fantasy paradigm (Saltz & Johnson, 1974). Here the teacher maintains control over the play episodes by

assigning children particular roles in teacher-selected fantasy stories. Procedures usually involve first reading and discussing the story with the children, then assigning them roles. To prompt an initial reenactment of the story, the teacher acts as narrator, and may also take on a role in the play. In subsequent enactments, children exchange roles and teacher assistance is phased out.

Christie's review (1987;1991) of the results of play training research demonstrates that these procedures have facilitative effects on a variety of literacy-related variables, including oral language development (Christie, 1983; Levy, Schaefer, & Phelps, 1986), story production (Saltz, Dixon, & Johnson, 1977; Saltz & Johnson, 1974), and story comprehension (Pellegrini & Galda, 1982; Saltz & Johnson, 1974; Silvern, Williamson, & Waters, 1983). Like correlational studies, experimental play training studies have raised a number of questions regarding the relation between dramatic play and story comprehension. Key issues include the relative impact of various features of dramatic play events including adults' directions about how to play (i.e., metaplay), children's negotiation of conflict with peers, and the symbolic transformations involved in pretense (Christie, 1991). Other issues include the impact of different adult roles in interventions, effects of familiar versus unfamiliar stories, differential effects depending on children's ages, and whether thematic-fantasy training generalizes to comprehension of stories not acted out (Williamson & Silvern, 1991).

Williamson and Silvern (1991) designed a series of play training studies to address some of these issues. Results of these experiments found similarly facilitative effects on story recall for a *directive* intervention where teachers ensured that children reenacted stories correctly and completely and a *facilitative* intervention where teachers established the story reenactment situation then encouraged children to take control of the play. As in other studies (e.g., Pellegrini, 1984) both groups outperformed a control group that heard but did not enact the stories. As to the issue of story familiarity, a significant interaction was obtained between the factors of intervention type and familiarity indicating that children who heard familiar stories performed best in the facilitative intervention, and that children hearing unfamiliar stories performed best in the directive condition. With regard to differential impacts of play training with age, Williamson and Silvern found in a first study that play training was beneficial for children between the ages of 5 and 6.9 years. In a second study, this benefit continued for below average comprehenders up to age 13 leading to the hypothesis

that as the difficulty of stories increases, more able students in the older group might also once again be benefited. Finally, these researchers addressed the relative impact of metaplay (i.e., metacommunication about play) and peer conflict resolution, versus role play and symbol transformations of objects. Their research design involved counting the incidence of each aspect of play in naturally occurring classroom play events, then using multiple regression to explore the contribution of these behaviors to story comprehension. Results suggest that the amount of metaplay aimed at directing the play (i.e., negotiating roles with other children), and the level of language production competence as demonstrated within thematic-fantasy play contributed significantly to comprehension, while play, itself, did not -- a result supporting earlier work of Rubin (1980) and Pellegrini (1984). The authors note that dramatic play is a complex event composed of both play (i.e., the children's actions in pretend roles) and metaplay. They hypothesize that while the symbolic transformations of dramatic play may remain personal, metacommunications about play turn children's attention to story events such as plot, characters, and to coordinating their points of view. They argue that metaplay cannot occur in the absence of play contexts and that, overall, play continues to provide important opportunities for enhancing story comprehension.

As this brief overview indicates, play training research supports the facilitative effect of dramatic play on story comprehension. It suggests that adult-supported story enactments improve story recall, and that this effect may be most powerful for early primary aged children and preschoolers, and for older children who are poor comprehenders. It also highlights the complexity of dramatic play contexts and raises a variety of questions about which aspects of play events are most influential in facilitating story comprehension.

While play training research explores specific hypotheses about the connection between play and story comprehension, there are important aspects of children's story-related play that necessarily remain unexplored. For example, because play training makes use of adult-initiated story enactments there is little possibility of observing spontaneous, child-directed play related to stories or books. Similarly, researcher-selected outcome measures focusing on a single aspect of literacy learning (e.g., story recall) limit the possibility of discovering other roles of dramatic play in literacy learning. In short, the experimental designs used in play training research offer important opportunities to explore

researchers' hypotheses and perspectives about the connections between literacy and story-related play. However, by doing so, they effectively limit the possibility of understanding the *children's* own ways of making this connection and their purposes for doing so.

In this paper, I report the results of two naturalistic studies designed to investigate children's explorations of books and writing in literacy-rich contexts. Because dramatic play was a central way of interacting with books for the group of children studied, it necessarily emerged as an important theme in my observations. Unlike much of the research reviewed above, this paper describes *child-initiated* forms and functions for book-related dramatic play. Though in the present studies adults supported play in important ways, it was the children who, for the most part, developed and directed book-related play episodes. The purposes of the analyses presented here are to describe the play observed and to offer working hypotheses concerning the functions of self-initiated, book-related, dramatic play in children's construction of *meanings* from books. I will argue below that there is much to be learned from observing children's own ways of interacting with books. This paper provides a glimpse of the way one group of children went about this task by connecting books and play.

Methods

Overview of the Studies

Data analyzed in this paper were collected as part of two related studies -- one a 9 month naturalistic study of one group of 16 children's literacy experiences in a preschool classroom, and the other a case study of my son's literacy learning from birth to age 4. The broad research question guiding both studies was: How do children learn literacy in their everyday activities? The school-based data were recorded as I participated as a researcher/teacher in a preschool classroom serving 38 White, middle class, 2- and 3-year-olds. Data from the 16 children with whom I personally worked are analyzed for this paper. The portion of the home-based data considered here spans a 13 month period beginning at my son, Christopher's, second birthday and continuing until the close of the school-based data collection. The home and school based studies were related in a number of ways. First, both studies focused on the ways that preschoolers learn literacy through their everyday activities with people and objects -- though one study focused on literacy interactions at home and the other

interactions in a preschool. Second, my son, Christopher, was a member of the preschool class I studied, creating the possibility for understanding home to school connections from an insider perspective. Overall, these studies provide complementary views of book-related dramatic play as they occur in the home and school. The settings and procedures for the two studies are discussed below, along with their associated strengths and limitations.

Settings and Participants for the Studies

Reading and playing at preschool. The preschool study was conducted at Walker School[1] -- a "parent's day out program" designed to serve the needs of families needing part-time child-care. During the year I collected data at the preschool, I collaborated with the classroom teachers Ginger Wells and Michelle Rayburn, my research assistant Leigh Ann Copus, and the school's director, Fran Rogers, to develop and put in place age-appropriate literacy experiences for the young children who attended the 2-year-old's class. To this end, we worked as a team, informally sharing observations about children's literacy learning and responses to the curriculum, and discussing the implications for changes in classroom literacy experiences.

Children attended the preschool one or two days per week, with enrollment in the 2-year-olds' classroom ranging from 12 to 15 children each day. The two classroom teachers worked with the children each day throughout the week. I was present in the classroom in the role of researcher/teacher two days per week (Wednesday and Friday) from the beginning of the school day until the children's nap began after lunch. Because of enrollment patterns, I was able to observe most of the 16 children with whom I personally worked on both of their days at school. (A few children attended only one day, or attended on an alternate pattern such as Monday and Wednesday.)

All children participating in the study were White and from middle-class backgrounds. Informal contacts with parents as they brought and picked up children, as well as the children's own comments about books, indicated that these children had many literacy experiences outside of school. Parents confirmed this observation through their written responses to a survey about the children's home literacy experiences.

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[1]Pseudonyms have been used for the school as well as for children participating in the school-based study.

Though the literacy curriculum in the 2-year-olds' classroom changed over the course of the year as a result of our collaborative curriculum development efforts, the general organization of the room remained the same throughout the study. Much reading, talking, and playing occurred each morning at the various learning centers set up around the room (i.e., blocks, manipulative toys, dramatic play, art, book center, writing table, etc.). Children moved at will from one learning center to another, playing alone, along side peers, or with me, Ginger, or Michelle. At the book center, I was often present to read and talk informally with children about the books they selected from those displayed on the nearby shelf. Early in the study, our research team did not purposefully support children's links between books and play the book center, though we often provided book-related props in the dramatic play and block centers. From the beginning, however, children brought book-related toys to the book center to hold as we read. Book reading was often interrupted by child-initiated play episodes. Children sometimes marked the transition from reading books to dramatic play by announcing their role as a dinosaur, a workman, or Dorothy from the *Wizard of Oz*. On other occasions their play began unannounced. They simply began to perform pretend actions or to talk with us in the role of an imaginary character.

During the second semester of the study the research/teaching team made a conscious curricular decision to support book-to-play connections at the book center (Author, 1994). We began to help children locate book-related toys and props, and to explicitly analyze connections between toys and the books being read. We also began to participate with children as they used toys to reenact scenes from books, and to explicitly suggest ways that children might link future play episodes to the books we were reading. These actions served to broaden the range of pretend play activities occurring in the classroom. For example, teachers located books related to the children's zoo play in the block center and encouraged them to see books as resources for play themes and information. However, in this book center, child-initiated forays into the world of pretend play continued to be brief, quickly developed episodes, interspersed in the midst of book reading and informal book discussion.

More developed book-to-play connections occurred in the dramatic play center, at the block center, and outside on the playground. On the playground, children pretended to dig up dinosaur bones in the sand after reading *Bones, Bones, Dinosaur Bones* (Barton, 1990), and enticed me to play

the Big Bad Wolf who would "huff and puff" and blow the playhouse down while they steadfastly refused to let me in by the "hair of their chinny chin chins." Most of these instances of sociodramatic play involved adults as well as peers. Like other children their age, the 2- and 3-year-olds in this classroom often sought the participation of adults who were able to make the rich interpretations necessary to understand their pretend actions, and who were willing to follow their lead in taking roles and acting out scenes (Bergen, 1988).

Group time brought additional experiences with books. Each day, one of the classroom teachers read a book related to the unit theme, and led theme-related songs, fingerplays, or games in a brief large group experience. The most frequent book-to-play connection during these events was Ginger's practice of bringing book-related toys to the circle for children to hold as she read.

Reading and playing at home. At the time of this study, my son, Christopher, was an only child of professional parents, and in many ways much like his peers attending Walker School. At 2 years 4 months old, he was near the middle of the age range for the class, which spanned 1 year 10 months to 2 years 10 months at the start of the school year. Like his peers, Christopher had many experiences with books each day. However, it is possible that because of my background as an early literacy researcher he experienced a more intense emphasis on emergent reading and writing experiences than some of his peers.

At home, Christopher and I frequently read books when I came home from work at the university. Story book reading was also a part of Christopher's bedtime routine. Analysis of a sample of video tapes recorded as we read together during his second and third years, suggests that my reading style was quite similar at home and at school. During book reading, my interactions tended to support exploratory book discussions (Barnes, 1992) -- especially analysis of connections between books, life experiences, and other books. During play, I encouraged connections to books by providing or helping Christopher create necessary props, and by talking with him about the connections he was making to books. Though I sometimes suggested book-related play, more frequently Christopher initiated these events. As a young 2-year-old, Christopher created and enacted most book-related dramatic play by himself -- sometimes breaking character to explain to me what he was doing, or stopping to answer my questions about his activities. Throughout the period addressed

in these analyses, he spent considerable time selecting toys and creating props to be used in his book-related play. As he neared 3 years of age, he began to seek my participation more often in the play scenes he devised -- assigning me specific roles and dialogue from the books we had read together. Many of his book-related play themes were explored over lengthy periods of time, with play increasing in complexity as he developed expertise with particular books and related play scripts.

When Christopher's approach to learning was compared to that of his peers, he demonstrated one of two common patterns seen in this group of children. Like 7 of the other children who participated in the school-based study, Christopher was an *interest theme-based learner*. That is, he pursued identifiable personal learning interests (e.g., tools, work machines, dinosaurs) over long periods of time and in a variety of contexts. The remainder of his classmates pursued a more eclectic mix of interests, usually over shorter periods of time -- a pattern I have labeled *sampling*. Unlike theme-based learners, samplers tended to become interested in some aspect of the classroom curriculum and explore this for a time before moving onto explore some new offering from the teachers.

Data Collection

The research procedures for both studies were guided by the assumptions of interpretive/constructivist research (Erickson, 1986; Guba & Lincoln, 1994; Lincoln & Guba, 1985). In both research projects, data were collected using ethnographic techniques of participant observation and informal interviewing, and data were recorded using field notes, video recording, and collection of artifacts. However, the nature of the studies and my roles in them created different patterns in the ways these techniques were used, and resulted in corresponding differences in the data sets constructed in each study.

School-based study. As mentioned earlier, I collected data through participant observation at Walker School two days each week. While in the classroom, I adopted the role of assistant teacher by reading, writing, and playing with the children. During the morning learning center period, I spent most of my time at the book center or writing table engaged in informal reading and writing activities with the children. For example, at the book center I read books selected by the children and talked with them about these texts and other issues of personal interest to them. At the writing table, I

exchanged notes with the children at a classroom mailbox, and wrote stories of picture captions of my own or with children as co-authors. During the remainder of the morning I moved with the class through activities that included snack, clean up, outdoor play, and large group time, assisting teachers and children as needed. Because teachers, parents, and children regarded me as a usual part of the classroom scene, I got to know them well, and had many informal opportunities to discuss the literacy experiences I observed.

I recorded data throughout the school-based study by video taping literacy events during learning center time and recording brief field notes to be expanded after leaving the school. During the first semester of the school-based study, our teaching/research team focused on developing a classroom writing center, with the result that most of my observations, field notes, and video tapes were recorded in this area. In the second semester, we turned our attention to developing new kinds of book experiences, including making revisions to the existing book center. This decision led me to shift the focus of data collection to the book center. For this reason, most of the school-based data on book-related play were collected during the last five months of the study -- the period from January through May. Data collected on book-related events included parent responses to a questionnaire regarding their children's reading and writing experiences and interests, video tapes of informal adult-child and peer-only book reading events at the book center, and video recordings of teacher-led large group story book reading events. Though other teachers were recorded reading informally with children at the book center, I was the most frequent adult reader on the days I was present in the classroom. Thus, my reading style and interactions had a major impact on children's expectations and experiences of events at the book center and are strongly represented in the book center data. I had only minimal impact on large group story reading events, however. I usually sat on the floor with the children while Ginger or Michelle read to the group.

In addition to collecting data in the book center and at group time, I used field notes to document the book-related play I observed in other areas of the room and school. Because of my research decision to spend the majority of my time in the book center during the second semester, most of the book-related play episodes recorded at school take place in or near this area. Others were

recorded as children came from other areas of the classroom to tell me about their play, and as we talked and played together at snack, lunch, or on the playground.

Home-based case study. Data from the home-based case study of Christopher provides a more comprehensive view of the ways one child linked books and play. In my role as parent, I was close enough to observe most, if not all, of his activities while we were at home together. Therefore, my field notes record literacy events throughout the day and in a broad range of settings including outdoor play, indoor play with toys, rides in the car, bath time, visits to the doctor, and so on. During the 13 month period considered here, I recorded field notes describing Christopher's reading and writing experiences an average of four days each week. These entries report literacy-related play episodes, literacy-related conversations, writing events and the artifacts they generated, reading events, and book discussions. During this period I also video taped at least one reading and writing event each month to provide a sample of the interactions in which the field note accounts were embedded.

Data Analysis

In both studies, data analysis was ongoing during all phases of data collection using the constant comparative method (Glaser & Strauss, 1967; Strauss & Corbin, 1990). I first identified book-to-play connections as an important theme in the home-based study and recorded both observations and related theoretical notes prior to the beginning of the school-based study. In retrospect, given my involvement in both studies, it is surprising that I did not initially identify play as an important aspect of events at the preschool book center. It was during the second month of our teaching/research team's work on developing the classroom book center (February) that I initially noticed the children's incorporation of toys and dramatic play into book reading events (Author, 1994). From this point, book-related play served as an important focus for my observations and in-process analyses in the school-based study.

After completion of the field studies, additional analyses began with the school-based data. First, I reviewed the field notes for examples of book-to-play connections. Next, I reviewed the first 20 one-hour video tapes of classroom literacy events for book-to-play connections, and transcribed relevant portions. Using the constant comparative method, I analyzed these data to identify key

characteristics of book-related play and to develop hypotheses about the role of this type of play in the children's literacy learning. In the next phase of analysis, I viewed the remaining 11 hours of video tape to challenge and refine both categories and hypotheses, with emphasis on searching for negative cases.

Next, I turned to the home-based data to refine and extend the categories of book-related play generated from the school-based data. These analyses first involved identifying all instances of book-related play in the field notes. I once again used the constant comparative method to categorize data -- beginning with the categories developed from the school-based data, and refining them as needed.

Both sets of analyses involved open and axial coding of the data (Strauss & Corbin, 1990). In the open coding phase of analysis, I examined the data to identify categories describing aspects of book-related play. During axial coding, I looked for relationships between categories. Analytic emphasis was given to identifying *properties* of book-related play and the *dimensions* of these properties along which events varied. For example, an important property of book-related play was the children's *purpose* for play. When I examined this property more intensively, I constructed a number of subcategories or dimensions of the purposes for book-related play (e.g., sorting out book details, personal inquiry, and so on). Additionally, during axial coding I generated and refined hypotheses about the role of the various types of book-related play in the children's literacy learning.

Strengths and Limitations

The results of these studies must be interpreted in light of both the strengths and limitations of the methods used. Both the characteristics of the research paradigm employed and the specific procedures and contexts for the studies are important in this regard. Since the differences in assumptions, purposes, and procedures between traditional/positivist research and interpretive/constructivist research has been the sources of much discussion elsewhere (Guba & Lincoln, 1994; Lincoln & Guba, 1985), my comments in this section are confined to the merits and problems as seen from within the interpretive/constructivist paradigm. Since both studies were conducted in this tradition, they share a number of general characteristics.

An important strength of these studies is the use of long-term participant observation as a primary means of data collection. Not only was I able to understand what was typical or atypical for

children in the home and school settings, but perhaps more importantly , I was able to make rich interpretations of the children's talk and actions. This is crucial when one is working with 2-year-olds, some of whom are just developing conventional oral language, and who rarely fill in the full context of their utterances and actions. Persistent observation combined with a long history of shared experiences made it more possible for me to interpret the intent of children's unconventional talk and play, and to recognize both implicit and explicit connections between their play and experiences with books. This was especially true with regard to understanding Christopher's actions and talk. Overall, because long-term participant/observation provides a rich context against which to interpret children's behavior, it also increases the possibility of identifying the playfulness and connectedness of children's playful responses to books. In addition, these methods allow for the evaluation of the impact of my presence on classroom events, and for judgments about the typicality of my observations.

My role as a parent/researcher had another unintended, but helpful, impact on this study. It heightened my awareness that, by comparison to my understanding of my own son's literacy behaviors, I had a less complete understanding of the other children I observed in the preschool. To increase the credibility of my interpretations, I frequently triangulated my observations and interpretations with both the classroom teachers and the children's parents to gain their insights about classroom events and interactions.

I also engaged in several other research activities designed to challenge my theoretical biases and developing hypotheses, and to help me remain open to other perspectives. These included regular conversations during data collection with a professional colleague who served as a peer debriefer (Lincoln & Guba, 1985), and intensive searches of the data for events that did not fit my developing hypotheses about the children's learning. Reviews of video taped data were particularly helpful in this regard, because the video tapes recorded classroom events in a manner that was less influenced by my interpretations of events than did the field note data. Video taped data allowed analysis from multiple perspectives. It was during this type of negative case analysis, that I initially became aware of the centrality of book-to-play connections in adult-child book reading events at the preschool.

Another strength of the research reported here is the analysis of two related data sets to provide a more multifaceted view of book-to-play connections than would have been possible if the home- and

school-based data had been considered separately. Specifically, the school-based data are strongest for providing a detailed picture of the ways that children and adults incorporated play into informal book reading events. Videotapes of these events offered the opportunity to microanalyze participants' styles and purposes for reading and playing at the book center. A detailed picture of large group story book reading was also recorded in the school-based data, revealing that book-related play had a relatively minor role in these events. Book-related play events in other areas of the classroom were also recorded, though less comprehensively and usually through the medium of narrative accounts in field notes. The home-based data, on the other hand, are strongest for documenting book-related dramatic play episodes of one of the students in settings outside of adult-child book reading events. Though the school-based data is strongest in representing play during informal adult-child book-reading events, and the home-based data is stronger in documenting self-initiated dramatic play events, each data set records events in both contexts. This overlap allows cross-checking of book-to-play patterns across contexts, and to some extent, across children.

Though I have argued above that the scaffolds employed increase the credibility (cf., internal validity) of the findings reported here, it is important to recognize special features of the data sets that may impact transferability to other settings. Most central are issues related to my participation and that of my son, Christopher. The data sets analyzed here are related in two important ways. First, my son was one of the 16 2- and 3-year-olds who attended Walker Day School where the school -based study was conducted. Second, in both studies, I appear frequently in the data as the adult reader, writer, and player with the children, and in all cases served as the recorder of literacy events. Though I used the home-based case study data to confirm and refine categories observed in the larger group of children at school, even so, the description that follows remains heavily influenced by Christopher's personal patterns of making book-to-play connections, and by my patterns of reading with children. Thus, as in all ethnographies, it is incumbent upon readers to consider carefully in what ways the research contexts studied are related to those to which they wish to transfer the findings. While the analytic properties and dimensions of book-related play described here should provide a useful lens for examining other contexts, similar research in other settings and with different groups of children is needed to render the impact of the present research contexts more understandable.

Findings and Discussion

Types of Book-Related Play: An Overview

In the studies reported here, play was a complex, and irrepressible force in children's responses to the real world events of home and school. Much of our existing research on the relation between play and literacy learning (e.g., Pellegrini & Galda, 1982) has focused on well-developed sociodramatic play episodes where groups of children organize and enact a pretend world. While sustained dramatic play episodes appear in these data, I frequently observed a type of play which was much more fleeting. At one moment children might be reading a book and discussing specific details of illustrations or information. In their next turn at talk they might respond in character as Mike Mulligan or tyrannosaurus rex. These kinds of spontaneous moves between the worlds of reality and play were so outside my own world as an adult that, at first, I overlooked them as worthy of mention as I collected data in the school-based study. Also, because many of these shifts to the world of play were brief in duration it was relatively easy to focus on children's participation in book-related discussion and overlook the play that occurred during reading events. What became more difficult to overlook, however, was a frequent pattern in which children located toys related to books, brought them to the book center, and then held them as we read, or used them to launch dramatic play. It was the book-to-toy connection that initially drew our research/teaching team's attention to the centrality of play in these young children's book reading experiences. Overall, for these young children, a wide variety of events -- including those linked to books -- offered the potential for playful response, exploration, or construction. Children skillfully shifted between book-talk and book-related play -- a feat that required the coordination of a variety of stances toward books. Each type of play seen in Table 1 occurred both at home and at school, and with Christopher as well as with other children in the preschool class.

Table 1: Types of Book-Related Play

Dramatic Play	
Playing books	Dramatic reenactments incorporating or extending book meanings
Playing at literacy	Participating in a reading or writing event through the persona of a pretend character
Playing a literate character	Reading or writing as part of the enactment of a dramatic play role
Exploratory Play	
Playing with book language	Experimenting with book language
Playing with props	Exploring the features of book-related toys and other props
Constructive Play	
Locating/producing props	Searching for or making props needed for book-related play

As defined earlier, in *dramatic play* children engage in pretend actions with objects or pretend to adopt social roles (Johnson, Christie, & Yawkey, 1987). In one type of book-related play, *playing books* , children incorporated elements of book meaning such as plot, characters, language setting, and illustrations. This was by far the most frequently observed category of literacy-related play event in these studies.

Also frequent were episodes where children *played at literacy*. This pattern involved reading to imaginary characters or stuffed animals, pretending these imaginary characters were "watching" as an adult read, voicing the pretend character's responses to books, or pretending that the character was engaged in writing alongside them. Unlike events where children focused on playing out scenes from books or exploring a character's perspective through play, here children's talk and actions remained focused on participating in reading events. Children appeared to play at being literate by bringing along a character from the world of play to keep them company in real-world literacy events.

Another type of book-related dramatic play involved playing a literate character -- performing literate actions as part of a dramatic role. In some of these events, children pretended to read or write because literacy had been portrayed in books or videos as central to their character's actions. In others,

children moved beyond the text to imagine new ways that characters might use literacy as part of their roles. Though this type of play has been of intense interest to early literacy researchers (e.g., Hall, 1987; Newman & Roskos, 1991; Schrader, 1991; Vukelich, 1991) it played a relatively minor role in this study -- occurring much less often than either of the other types of dramatic play. This may be, in part, a reflection of the curriculum. In this study the teachers and I focused most strongly on providing demonstrations and support for the use of writing in personal communication activities such as note or story writing. The centers most associated with dramatic play (i.e., the blocks and housekeeping center) contained few writing materials. Though books were made available in many areas of the classroom in the second semester when we began to focus on book-to-play connections, reading continued to be most associated with the book center. Thus, while teachers sometimes made suggestions for playing out the literate actions of characters, and children sometimes spontaneously collected books or writing materials as props for their dramatic play, these patterns remained less frequent than playing books or playing at literacy.

However, not all book-related play observed in these studies could be characterized as dramatic play (i.e., involving symbolic transformations of roles or objects.) Children also engaged in *exploratory play* that involved acting on objects and people in the environment for the purpose of experimenting with their reactions (Bergen, 1988). Exploratory play with book language sometimes involved children in creating self-directed monologues (cf. Weir, 1962) where they repeated to themselves phrases and sometimes whole paragraphs from books they had read. In other instances, children conducted social experiments about the meaning and impact of book language on others. It also sometimes involved purposeful plays on the words and language patterns of books. Exploratory play with props involved children in manipulating, moving, and examining sets of book-related toys. In some cases exploratory play occurred apart from dramatic play, but in many instances children moved back and forth between exploration and pretense.

A third type of book-related play, *constructive play* (Bergen, 1988), often diverted children's attention from playing out book themes and enacting characters to assembling the props, costumes, and sets needed for play. In the school-based study, episodes of prop and scene construction were sometimes followed by dramatic play or analytic book discussion. On other occasions, children

became so engaged in locating and setting up props that they never returned to book-related talk or play, moving instead to exploratory play with the toys. Christopher's book-related constructive play tended to be more complex at home than episodes observed at school, perhaps because of fewer distractions, greater control over the course of play events, and more intensive one-on-one support from adults in carrying out his plans.

As this overview indicates, dramatic play was only one part of the children's repertoire of book-related play. Nevertheless, it appears in both data sets as the most frequent and most developed type of book-related play. Many instances of book-related exploratory or constructive play were interspersed in the midst of dramatic play episodes or began as part of dramatic play. The remainder of this paper describes the properties and dimensions of the book-related, dramatic play observed in this study and the presents hypotheses constructed to capture the role of book-related dramatic play in the children's literacy learning.

Book-Related Dramatic Play: Properties, Dimensions, and Connections to Literacy Learning

Researchers interested in the play/literacy connection have tended to measure and describe a single characteristic of play such as completeness of dramatic reenactments of book plots (e.g., Pellegrini & Galda, 1991) or the ways that children incorporate reading and writing behaviors into play scripts (e.g., Hall, 1991; Neuman & Roskos, 1991). My initial attempts to assign play events to categories defined by single properties such as these were frustrated by the diversity and complexity of the play events recorded at home and at school. Additional analyses suggested that a more fruitful approach to understanding the book-to-play connections observed in these studies involved describing play events in terms of set of properties (Strauss & Corbin, 1990). In the sections which follow, I describe six properties that are key to understanding the nature of the book-related play observed in these studies. They include (a) children's *purposes* for play, (b) the *perspective* or point of view explored, (c) the type *of intertextual ties* constructed between books and playscripts, (d) the *sign systems* used and their relation to book reading events, (e) the kinds of *social interaction* involved, and (f) the *scope of play*. Because children's purpose for engaging in book related play served as a core category in my understanding of the data, this property and its dimensions are described first. The

other properties appeared to be combined in context-specific ways to achieve these purposes and are described in subsequent sections.

Table 2

Core Property: Purposes for Book-Related Dramatic Play

Dimensions	Types of Literate Behaviors Observed
Connecting Books to the Child's World	Locating and holding toys related to books being read
Responding to Books	Acting out response to book events and characters
Participating in Book Reading Events	"Playing at Literacy": pretend characters participate in reading events
Experiencing Books	Reenacting books to create a "lived-through" experience
Inquiring	"Sorting out" the author's meanings Personal Inquiry: questions about the world Personal Inquiry: social/emotional issues Personal Inquiry: innovative connections between personal inquiry themes

Purpose

In these data, children used play as an entree into the world of books in a number of ways. At times they used dramatic play as a way of participating in book discussions. At other times, they used books to fuel their play. In both book reading events and dramatic play events, children played for purposes that suited the current situation and their personal interests. The children's five major purposes for play -- connecting, responding, participating, experiencing, and inquiring -- are more fully discussed below.

Connecting books to the child's world. Analysis of data from both home and school settings suggests that the 2- and 3-year-olds participating in these studies viewed play as an important means of gaining access to both the meanings and the participation structures implicit in informal book-reading events. One type of play event that served this purpose of connecting books to the child's world involved children's active *search for toys and props related to the books* being read. Once located, children sometimes moved from book reading to dramatic play, but in other instances, these

toys were simply held as we read. In some cases props were realistic models of items pictured in books, but children also transformed objects with little similarity to book illustrations. For example, while reading *Whatever Happened to the Dinosaurs* (Most, 1984) Adam held up a Hamburglar puppet -- a fast food chain character whose head is made of a hamburger -- and announced that it was Tyrannosaurus Rex.

Though the phenomenon of locating and holding book-related toys was ever present both at home and at school, the children's talk provided few direct clues to the role of this practice in their literacy learning, though several hypotheses are theoretically supportable. First, locating book-related toys may have been a manifestation of the general learning strategy of looking for connections between one's knowledge base and present experiences (cf. Piaget, & Inhelder, 1969; Peirce, 1966, etc.). Given the obvious excitement children expressed at finding and introducing toys related to the books being read, this practice may have been part of the search for connections between books and familiar world experiences and objects. By searching out book-related toys, children connected book-reading events rooted in the adult world with play events rooted in their own experiences. Second, locating book-related toys may have signaled the potential for future play. Children may have located book-related toys as a means of facilitating play. Certainly, children located toys which they could, and often did, use later in exploratory or dramatic play. A third hypothesis is that holding toys may have supported comprehension by creating a link to the child's world experiences. Books required children to use verbal text and static, 2-dimensional illustrations as cues for imagining a 3-dimensional world full of actions and objects framed by the passage of time. I expect that toys and props, whether realistic or transformed, made book-reading events more concrete. They may have lessened the cognitive load of conjuring up images from texts that were, at best, abstract and partially specified. When holding a dinosaur, many aspects of the text were signed in a more concrete way, leaving more attention for other aspects of comprehension and response.

Responding to book-reading events. As children read and discussed books, they sometimes shifted from talk to play to *respond to books*. Example 1 demonstrates a common pattern in which children expressed their reactions to characters and events by directing physical responses to a book's illustrations.

Example 1: Personal Response to *The Farmyard Cat*
February 20, VT: School[a]

Steve and I are reading *The Farmyard Cat* (Anello, 1987) at the book center. The story begins with a cat hanging on the hen-house in an attempt to catch some chickens for his dinner.

I read: "But... down bent the wire, and down fell the farmyard cat. With claws stretched w-i-d-e, she landed....on top of the farmyard dog."

Steve: "Why?"

Debbie[b]: "I think he was up high and fell on him."

I continue reading: "The farmyard dog was very angry. He began to chase the farmyard cat. 'I'll get you cat!' growled the dog. 'I'll get you.'" The illustration shows an obviously angry dog with bared teeth, running after the cat.

Steve shows me the toy alligator he has been holding. He makes sound effects, "Dop, dop, dop" as he makes the alligator bite at the picture of the farmyard dog.

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[a] The code "VT: School" indicates that the data source is videotape recorded in the school-based study.

[b] The author is the adult reader in all transcripts included in this paper. All references to "Debbie" in this paper refer to the author.

This book was a favorite of Steve's, and in previous readings he had often quoted with great satisfaction the final line of the book in which the cat announces her victory over all the animals who have been chasing her. Here, once again, Steve identifies with the cat, and acts out his own angry response to the dog character. Similar events occurred in the home-based data, as well. On the first reading of *Swimmy*, (Lionni, 1963), Christopher rolled his toy truck over the illustration of the "mean tuna" who chases Swimmy and the other small fish. Not satisfied, he grabbed a toy golf club and bopped the page again saying, "I'm gonna get the tuna!" (7/31, FN: Home)[2]

In both events, children turned to the familiar medium of play to symbolically express their responses to book characters. These data support the hypothesis that the real-time actions and dialogue of dramatic play provide young children with a powerful means of expressing their personal responses to books. At times, dramatizing one's reactions appeared a more accessible and expressive medium than talk alone -- even when the play involved pretend actions performed on 2-dimensional illustrations. Both at school and at home, children were constantly being reminded by adults to "use

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[2] The code "FN: Home" indicates that the data source is field notes recorded in the home-based case study.

words" rather than actions to express their thoughts and emotions. These episodes suggest that play continued to provide a safe haven in which they could combine both actions and talk as a form of response.

Participating in book-reading events. A more sophisticated and distanced use of play within book reading events involved "playing at literacy." In these events, children participated in book reading events by reading to imaginary characters or stuffed animals, pretending that these imaginary characters were "watching" as an adult read, or pretending that the character was engaged in writing alongside them. Here, play was adapted to fit the familiar participation structures of adult-child book reading events. Children used role play as a medium for taking on adult-sanctioned roles such as asking questions or expressing personal interpretations of a book. For example, Sherra brought her bunny to the book center to sit in her lap and "read" with the group assembled there, and later took him to the writing table and produced a journal entry for herself as well as for her bunny (2/22, FN: School). In some cases, children even voiced a pretend character's responses to books: Christopher: "The [toy] dinos don't like this part [*of Mike Mulligan and His Steam Shovel*]" (3/18, FN: Home). For both Sherra and Christopher, imaginary characters appeared to be the children's alter egos. Sherra's bunny produced a journal entry remarkably like her own, and Christopher's toy dinosaurs expressed his own dislike of the way the more modern electric- and diesel-powered shovel characters tease and reject Mary Anne, the steam-powered shovel, in *Mike Mulligan*.

During data collection, the children's purposes for entering into book discussions in the persons of a toy animal were, for me as an adult reader and researcher, the most curious pattern of book-related play observed in these studies. However, subsequent opportunities to look closely at videotapes of these events has suggested the hypothesis that playing at literacy helped children make important connections between adult-structured book-reading events and the world of play. For these young children, dramatic play was a central means of engaging with the world. As such, it was no less central to their early encounters with books and book-reading events. When children played at being literate they bought along a character from the world of play to keep them company in real-world literacy events. My hypothesis is that children used play as a medium for participating in book reading

events because it provided a connection to their familiar, playful ways of understanding and interacting with the world.

Experiencing books. In these studies, a great deal of book-related play seems to have as its purpose creating an aesthetic or *lived-through experience* of the book (Rosenblatt, 1978). Unlike events where play was obviously related to questions the children had expressed about the text or the world, in these events children appeared less concerned with what they would take away or learn from the event, than with the immediate enjoyment of playing out some aspect of a favorite story.

For example, on the school playground I noticed Jane looking up to the sky and letting a ball roll off her nose to the ground. When I asked what she was doing, she replied: "I'm bouncing it on my nose like the seal in the *Spot* book." (10/9; FN: School). This explanation rendered her actions entirely interpretable since we had recently read the book, *Spot Goes to the Circus* (Hill, 1986), where the final pages show a seal and a dog named Spot balancing beach balls on their noses. The children appeared to have a similar purpose for playing out the scene from *The Three Little Pigs* where the wolf knocks on the door and demands that the pigs let him in. This play became a favorite on the school playground, and children often requested that we replay the scene again and again. In my child-assigned role as the wolf, I "huffed and puffed" using my most menacing voice, while clawing at the door of the playhouse. The children squealed delightedly in their roles a pigs, reveling in their power to stand up to the wolf, and relishing the fear of being threatened within the safety of play (3/16. FN: School).

Rosenblatt (1978) has suggested that an aesthetic stance toward reading turns attention inward to the readers' own immediate experiences as they respond to text. In these data, children often appeared to play out scenes from books for the sheer enjoyment of experiencing the book in the multisensory medium of dramatic play. Dramatizing scenes from books brought to life, in new ways, stories that had previously been experienced primarily through text and illustrations. These observations support the hypotheses that dramatic play supported children's aesthetic responses to literature, and that an aesthetic stance is an integral part of even very young children's literacy repertoire.

Inquiring. Another important purpose for play was *inquiry*. Children often launched play episodes that allowed them to explore their questions about an author's intended meanings or to explore personal questions and interests using books as a backdrop. One of the most common types of comprehension-focused play, involved children in *sorting out book meanings* through play. This pattern is not unlike observations of older students in peer-led literature discussion groups (Barnes, Corley, & Thompson, 1971; Newbold, 1993), where the purpose of talk was to sort out plot details and to explore personal interpretations of the author's meanings.

Near the end of his second year, my son Christopher developed an intense interest in work machines that lasted for many months. He was especially taken with the book *Mike Mulligan and His Steam Shovel* (Burton, 1939) and a video version of the book introduced to him by his teacher, Ginger. Both at home and at school he engaged in many conversations and play episodes related to this book. A central theme of the book revolves around the technological obsolescence of steam-powered work machines in the face of the invention of more powerful and efficient diesel, gasoline, and electric powered machines. Not surprisingly, the impact of changes in technology was not initially an easy concept for Christopher to understand. At 3-years-old he had barely lived long enough to directly experience such changes, and would have been unlikely to be aware of them if he had. In addition, since Christopher had never seen a steam-powered machine of any kind, he asked a great many questions about illustrations showing Mike Mulligan shoveling coal into Mary Anne, the steam shovel's, boiler. In Example 2, play became part of this sorting out process.

Example 2: "This is Mary Anne"
April 4, 19: Home

This afternoon after Christopher came out of the bathroom, he told me "This is Mary Anne." I didn't exactly understand what he meant, and so went on to the kitchen. He closed the bathroom door and then ran to find me.

"The bathroom is Mary Anne," he said.

"Mom: "Does it have a potty?"

Christopher: "No, this where I shovel in the coal." He got a long handled wooden spoon from the kitchen drawer and took me back to the bathroom. Here he showed me how he could pretend to use the spoon to shovel coal into the door of the bathroom which stood for Mary Anne's boiler.

In this episode Christopher used play to continue his exploration of how steam-powered machines work. By transforming the relatively small enclosed space of our bathroom into Mary Anne's boiler,

and turning a spoon into a coal shovel, he used play in his quest to understand steam-power and as a means of checking his interpretations with me. Christopher repeated this play many times before moving on to other playscripts. These observations support the hypothesis that play provided an arena for children to develop and refine their hypotheses by revisiting and replaying scenes from books. Such play appears to require an efferent stance as described by Rosenblatt (1978). Here children were concerned with what they might take away from play, and how it could increase their understanding of the meanings of the text.

Other instances of comprehension-focused play were aimed not at understanding an author's intended meaning, but at exploring *personal inquiry* questions, instead. Here children's play was no longer constrained by books, but instead books were put to novel uses related to the children's questions. Books were incorporated into play in unique ways that were related to the life worlds of children, but would be unlikely to have been anticipated by the books' authors. I observed children engaging in personal inquiries of three types. They explored questions about the world, social/emotional issues, and connections between knowledge domains.

Both at home and at school, children often used play to explore aspects of books related to their own questions, interests, and life experiences. An example comes, once again, from Christopher's play related to *Mike Mulligan and His Steam Shovel* (Burton, 1939).

Example 3: "Why Does Mike Smoke a Pipe?"
November 5, FN: Home

Christopher wants to read *Mike Mulligan and his Steam Shovel* (Burton, 1939) for the first time in a long while. As we read, he wants to stop and talk about the page where the townspeople discover Mike Mulligan and his steam shovel, Mary Anne, haven't left a way to get themselves out of the cellar they have just dug. The illustration shows people crowded along the edge of the excavation site, calling down to Mike: "Hi, Mike! How are you going to get out?"

He asks a number of questions about why Mike Mulligan was trapped. Next he asks me to return to a page where the illustration show Mike smoking a pipe -- something he had also noticed on the video version of the story a few days ago. At this point our book reading is interrupted by a loud buzzer indicating that the laundry needs attention.

As we move to the laundry room to take some clothes out of the dryer, Christopher grabs the toy back hoe that he calls Mary Anne. "Why does Mike smoke a pipe?" he asks.

We talk again, as we had when he first noticed the pipe, about the health risks of smoking -- a topic that comes up fairly frequently when we see people smoking. I explain that this book was written a long time ago before people knew smoking was dangerous to their health.

Switching gears again, Christopher asks me to call out to him "Hi, Mike! How are you going to get out!"

I suggest that a square laundry basket could be the basement. He hops in holding his toy back hoe and calls for a "pipe." I give him a straw from the kitchen. He promptly begins puffing on the straw, pretending to smoke.

He repeatedly asks me to play my part in this scene, each time responding by puffing strongly on his straw "pipe." The play continues until we leave the laundry room.

In Example 3, Christopher focuses on two aspects of the book that are of current interest to him: the scene where the townspeople realize Mike and his steam shovel are stuck in the cellar, and illustrations portraying Mike as a pipe smoker. His reenactment of the scene with the townspeople is consistent with other instances of sorting out play I observed. Christopher often replayed things he didn't understand or found troubling in books. The focus on the pipe is another matter, however. Here, his talk and play highlight pipe smoking -- a detail in an illustration that is never mentioned in the text. Pipe smoking was important to Christopher not because it was central to the book's plot, but because it was central to his experiences in our family. Christopher used the book as a convenient arena to explore unresolved issues related to smoking. The pipe play served to explore a cognitive conflict between his family's values and his observations of smoking in the world at large and in books.

Play served as a convenient and safe arena for inquiries into social and emotional issues as well. In Example 4 below, I reproduce excerpts from my field notes describing a play episode where Christopher enlisted me to help him reenact a scene portrayed in the PBS television series, *Marty Stouffer's Wild America*, as well as in the book by the same name (Stouffer, 1988). In the episode entitled, "The Man Who Loved Bears", a wild life photographer named Marty Stouffer raises a grizzly cub for the eventual purpose of reintroducing these bears to Colorado. At first, the little bear, Griz, lives inside his wilderness cabin. However, as she grows larger, more active, and more destructive Marty moves her bed outdoors. As seen in Example 4, Christopher's reenactment of this scene remained close to the story line. However, as his mother, I suspected that he was not sorting out details of the plot, but his relationship with me, instead.

Example 4: Baby Griz

February 9, FN: Home

Field Notes: The Marty Stouffer play continues in the bedroom with Christopher leaving his toy bear, Baby Griz, outside of the door of his cabin (i.e., the walk in closet). He tells me to make Griz cry and wants me to ask him, in his role as Marty Stouffer, to come get her. Each time I do so, he revels in refusing. He insists that we replay this scene many times over the next hour as I straighten

the house. He sometimes refuses to come get Cris because she has been "bad", and at other times because he is "too busy."

Theoretical Notes: This seems to me like his way of playing out and controlling a situation he can't in real life (i.e. being asked to sit in his time out chair, or perhaps Mom leaving for work and not being able to come when he calls. Or perhaps me begin too busy with housework to play right now.)

Though I generated several alternate hypotheses in my theoretical notes about Christopher's purpose for this play, as a parent it was clear to me that this event was not really about Marty Stouffer and Baby Cris. Instead, he used a scene from a familiar book and video as a vehicle for exploring social/emotional issues related to power relationships between parent and child.

Play also supported children's personal inquiries by providing an arena for exploring innovative connections between their personal inquiry themes. Example 5 is a continuation of the Marty Stouffer play begun in Example 4.

Example 5: Marty Meets Work Machines and Dinosaurs
February 9, FN: Home

Christopher is pretending to be Marty and has assigned me the role of Diane (Marty's wife). He gets on a police car riding toy and begins to ride around the house.
Christopher: "Can Marty have a back hoe on his car?"
Mom: "I doubt it. Back hoes don't attach to cars."
Christopher: "Yes. This is a back hoe. He uses it to dig holes for creatures."
Mom: "Oh! like for their dens?"
Christopher: "Yeah, to live in." He rides around the room and circles back to me.
Christopher: "Marty is a paleontologist. He digs for dinosaur bones."
Mom: "So he looks for live animals and fossils bones?
Christopher: "No, just dinosaur bones! "

In this event, Christopher linked three personal themes that had consumed a great deal of his time and attention during the previous year: Marty Stouffer, work machines, and dinosaurs. Despite my discouraging response to his initial link between Marty Stouffer and work machines, he forged ahead to develop his playscript. In so doing, he constructed a plausible, but novel, rationale for this connection. As the event continued, he constructed a second scenario in which Marty might have a back hoe -- this time basing his explanation on information gained while reading about dinosaurs. Here, as in Example 3 and 4, play incorporated book themes and content in ways that served the child's personal purposes and inquiries.

related dramatic play, what they are learning, and why they have launched book-related play episodes, it is important to understand children's decisions about each of the additional properties discussed below.

Table 3

Additional Properties of Book-Related Play

Property	Dimensional Range
Perspective	Author ..... Character ..... Child
Intertextual Ties	Reenactment ..... Improvisation
Sign Systems	Transfer ..... Transmediation
Social Interaction	Individual Pretense ..... Sociodramatic Play
Scope	Parts ..... Whole

Perspective

Variation in children's purposes for book-related dramatic play required related variations in the perspective or point of view explored in play. When children focused their play on sorting out or comprehending books, they committed themselves to exploring the *author's* perspective. In a school-based reading event, Marshall explored book events from the author's perspective.

Example 6: Acting out a Scene from *The Farmyard Cat*
February 20, VT: School

At the book center we are reading *The Farmyard Cat* (Anetlio, 1987)
Marshall brings a toy horse over from shelf.
Marshall: "There's a horse." [Holds toy next to page]
Debbie: "Oh! There's a horse just like that one." [points to page]
Debbie continues reading.
Marshall holds the horse and watches intently.
Debbie reads: "The animals were going too fast. Suddenly the farmyard cat stopped."
The illustration shows the animals piling on top of one another.
Marshall picks up a toy bull and places its feet on top of the toy horse's back.
Debbie reads: "The farmyard animals fell over the farmyard cat. The farmyard animals fell over each other."
Marshall continues to create a pile of animals as in the illustration.

In this event, Marshall's enactment of the pile up of animals that occurred after the characters' sudden stop appeared to be aimed at understanding the event introduced in print by the author, Christine

Anello, and in pictures by the illustrator, Sharon Thompson. His play reenacts a portion of the author's story line, remaining as close as possible to book events. Similarly, in Example 2, Christopher's enactment of shoveling coal into Mary Anne, the steam shovel's boiler, is focused on understanding the author's implicit meanings about the way steam powered engines are fueled.

On other occasions, children attempted to experience the world through the perspective of a particular *character*. Sometimes children's play served as a character study designed to explore inferences about aspects of the text left unspecified by the author. Other play episodes moved well-past the story-line to explore how the character might react in entirely new situations. Example 7 is typical of character studies conducted through dramatic play.

Example 7: "I'm Calling the Workmen"
February 2, VT: School

I am reading *Monster Road Builders* (Royston, 1989) to several children at the book center. Christopher is sitting on a bulldozer riding toy as we read a page where the text discussed back hoes. In the illustration, several workers are seen operating machines. One worker has left his back hoe and appears to be walking across a muddy field. As he steps into the mud, his boot becomes stuck and he pulls his foot out of it. The illustration shows him about to step into the mud with a quizzical look on his face.

Christopher holds the receiver of a toy phone, and puts it to his ear. Though his first words are partially unintelligible on the videotape, it is clear he has moved into the world of dramatic play.
(1) Christopher to imaginary character on the other end of the phone.: "Hey (***)."
(2) Christopher to participants in the book center: "I'm calling one of the workmen."
(3) Debbie: "You're calling one of the workmen?"
(4) Christopher into the phone: "Hello?"
(5) Debbie returns her attention to the book and begins reading aloud.

In this event, Christopher launches a brief dramatic play episode in which he begins to explore actions that might be taken by the workmen pictured in the illustrations. His play served to bring to life characters seen only in the freeze-frame world of illustrations, and never mentioned in the book's text. Children sometimes asked adults to participate in co-authoring character studies of this type. When characters were pictured but given no dialogue in the text, children frequently asked the question, "What's he saying?",– prompting me to move to the world of imagination and dramatic play to provide dialogue implicit in the scenario imagined by the children.

Finally, children used play to explore their own *personal perspectives*. When children used play to express their personal responses as Steve did when he hit at the illustration of the farmyard dog

(Example 1), they were primarily interested in exploring books from their own perspective rather than from that of the author or a character. Children's personal inquiries were usually launched as explorations of their personal perspectives, as well. For example, when Christopher played out scenes focusing on Mike Mulligan's pipe in Example 3, and enacted the scene where Baby Grizz is left outside Marty Stouffer's cabin in Example 4, he explored his own perspectives on story events rather than those of the author.

Overall, an important consequence of the children's links between books and dramatic play were frequent shifts of stance requiring them to act on imaginary worlds from alternate points of view. These data support the hypothesis advanced by Vygotsky (1978) that dramatic play provides an important arena for children to explore and experience the shifts of stance required to separate meaning from objects. For the young children observed here, exploring books from one's own perspective was only one option among many. In dramatic play, children were no longer bound by their personal roles or the real-world identities of the objects physically available to them at home or in the classroom. Instead, they were able to symbolically transform both role relationships and objects in order to explore the world through the perspectives of authors and their characters.

Though Piaget (Piaget & Inhelder, 1969) suggests that 2-year-olds are incapable of decentered and reversible thought of this type, Vygotsky (1978) has challenged this notion and offered an explanation as to why dramatic play provides a supportive context for abstract thought. Vygotsky suggests that the toys and other objects used in dramatic play provide a "pivot" which young children use to separate objects from their meanings. Findings of research (e.g., Berk & Winsler, 1995; McCune, 1993; Tamis-LeMonda & Bornstein, 1993) showing that the flexibility of children's object substitutions (i.e., pretending a block is a car) increases with age also provide support for Vygotsky's theory. While toddlers tend to pretend most easily with realistic objects (e.g., they make a toy replica of a horse gallop along), around 2 years of age, children begin to make transformations of less realistic toys (e.g., a stick becomes a horse). All of these findings suggest that dramatic play may be supportive of literacy learning, in part, because it involves the use of props as signs, and invites children to transform these objects in ways that separate them from their everyday existence in the real world.

Donaldson's (1978) work suggests a second reason for the supportive nature of dramatic play in helping very young children take on the perspectives of others. She argues that children are able to use decentered thinking in some kinds of situations more easily than others. Specifically, she suggests that young children are most capable of taking on the perspective of others when situations make "human sense"; that is, when children can draw on their own experiences to understand characters' motivations and intentions. I would argue that the book-related dramatic play observed in this study provided such a context. Because children controlled the focus and content of play, they chose as the subject for pretense, characters and inquiry questions that were relevant to their personal experiences. Thus, Christopher was capable of imagining what a workman character from *Monster Road Builders* (Royston, 1989) might do with a telephone. By drawing on his previous experiences with workmen in books and in real life, as well as his experiences with telephones, he was able to develop a reasonable script for the workman's actions. Note here, that the presence of a realistic toy telephone had an important influence on his playscript.

The data presented in this study suggest that dramatic play was a flexible and supportive medium for adopting the perspectives of authors/illustrators and their characters. The theoretical perspectives discussed above support the hypothesis that this is so because dramatic play invited symbolic transformations, provided multi-modal signs that could be used as the pivots for such transformations, and because children chose for their play book-related contexts that made human sense, given their previous experiences.

Intertextual Ties

A third property of the book-related dramatic play observed in these studies was the type of intertextual ties children constructed between book content and their own play scripts. As seen in the examples provided thus far, children's play ran the gamut from *reenactment to improvisation*. Some play scripts remained very close to the text, as did Marshall's attempt in Example 6 to use toys to physically reenact the pileup of animals pictured in *The Farmyard Cat* (Anelio, 1987). Christopher's playful exploration of the workman's perspective in *Monster Road Builders* (Royston, 1989) (Example 7) lies in a middle range. Here he invents dialogue and actions for the character, but seems to remain within the story line proposed by the illustrations. In Example 5, however, he moves

toward improvisation when he adds a book how to Marty Stouffer's car. In this last example, books became a jumping off point for creating a play script in which information from several sources was combined in appropriate and innovative ways. Note here, however, that not all personal inquiries made use of improvisational playscripts. When Christopher explored parent-child power relationships in Example 4, he did so using a close reenactment of a scene from the *Marty Stouffer's Wild America* (Stouffer, 1988) book and videos.

Sign Systems

A fourth property of play was the children's use of multiple sign systems, and the relation of the sign systems selected to those used in book reading events. Book-related dramatic play involved children in expressing their meanings through oral language, gesture, movement, music, props, wardrobe, and set design. Dramatic play sometimes involved the *transfer* of signs from book reading to play. It also involved *transmediation*: the expression of meanings constructed in one sign systems through other sign systems (Eco, 1976; Siegel, 1985, 1995; Suhor, 1982, 1984).

When adults and children read books aloud, they used a variety of sign systems to accomplish these events. Most obvious were the use of oral language to voice the printed text and the art used to graphically illustrate stories. However my analyses of book reading events video taped at school and at home suggest that adult readers also used other sign systems such as facial expression, intonation, and gesture to bring books to life. Thus, book reading incorporated many of the same sign systems children used in their play.

Example 8: Book Reading As Drama
March 13, VT: School

I am reading *If the Dinosaurs Came Back* (Most, 1978) to a group of children in the book center. I read the text: "If the dinosaurs came back, they could scare away robbers." The illustration shows two masked robbers at the bottom of a ladder leaning against a second story window. A dinosaur is holding them at bay with bared teeth. The robbers stand with their hands up. Near their feet are several bags, -- presumably loot they have dropped upon seeing the dinosaur.

Christopher: "What is he doing?"

Debbie: "This is the one where he's scaring away robbers."

Marshall: "How's he doing it? Is that a robber?"

Debbie: "I think this is a robber." [Points to one of the masked figures.] "They [robbers] are going 'We give up!" [Uses low voice for robber, and raises one hand in the air as in the illustration in a sign of surrender.]

"And they are dropping their things. Maybe they have taken a ladder and climbed into that house. [Points to house, then slides finger up the ladder in the illustration]. See?"

"Now the dinosaur's going, 'Ehhhhhh" [Makes growling sound effect and bares teeth], and they are saying 'OK, OK, we'll give everything back!" [Uses low voice for the robbers and raises hands in air once again.]

This excerpt demonstrates that these children did not experience books simply as oral renditions of print accompanied by pictures. Book reading often included many elements of drama. As I talked with the children about a page in *If the Dinosaurs Came Back* , I used oral language not only to explain what I perceived to be happening in the illustration but also to create and enact dialogue for the robbers and the dinosaur. Gesture was used within the book discussion to point to relevant parts of the illustrations and to bring to life the movements of the robbers as they climbed up the ladder. Gesture was further used to act out in real time the robbers' raising of their hands in surrender. Thus, in book reading events children sometimes saw demonstrations of sign systems other than language and art, and in some cases were able to *transfer* them relatively in tact to play. As might be expected, in these data the most frequently transferred sign system was oral language. Children transferred not only book-specific vocabulary, but also dialogue, informational passages, and narration as part of their play.

Several brief examples provide a flavor for children's transfer of book language to oral language in dramatic play. For example, Christopher insisted on using Burton's (1939) term "cellar" when playing *Mike Mulligan* in the sand box, and consistently corrected me when I asked if he was digging a "basement" -- a term more familiar in our dialect (7/18: FN: Home). Steve, provided a typical example of the importation of book dialogue into dramatic play. When playing with toy animals, he was frequently heard quoting from *The Farmyard Cat* (Anello, 1987) -- especially the repeated threat, "I'll get you!", made by the other animals as they chased the cat (4/10, VT: School). That children transferred vocabulary and dialogue to play, is perhaps not too surprising. Specialized vocabulary and repeated phrases were often the target of such transfers. However, importation of oral language from books to play was not limited to books with rhyming or predictable language patterns. Longer passages from information books also became a source for play language. For example, during a family vacation to Yellowstone National Park we attempted to draw Christopher's attention to the natural beauty passing by the windows of our car as we toured the park. Despite these parental

efforts, he remained in his own world of play. From the back seat we overheard a quiet song accompanying the movement of small toy work machines: "Hundreds of workers digging with hand shovels cannot dig a big hole as fast as an excavator can." (3/12 FN: Home) -- a direct quote from the first paragraph of a favorite information book about work machines (Relf, 1984).

Moving from reading books to playing books often involved the *transmediation* of meanings encountered in text and illustrations into other sign systems. In dramatic play, this often involved locating or constructing props and wardrobe, physically arranging place spaces, coordinating movements of characters and objects, and pacing one's play in real time. For example, while reading and talking about an entry from the *Animal Encyclopedia* (1989), Melanie left the book center to gather wild animals toys which she then used to play out the movements and postures of the animals as described in the text and illustrations (2/27, VT: School).

Sometimes transmediation motivated a move from dramatic to constructive play in order to create the appropriate props. For example, in the home-based study Christopher decided that his role as Marty Stouffer demanded a pair of snowshoes for tracking animals in deep snow (1/31, FN: Home). When I refused to look for a pair at local stores reminding him that it was unlikely that such footwear could be found in middle Tennessee, he launched into a lengthy period of constructive play. He eventually created pretend snowshoes by taping wooden paint stirrers onto the bottom of an old pair of my house shoes. This project was followed by another one aimed at converting a childsize grocery cart into a dog sled, complete with cardboard strips trailing from the back to serve as drag brakes. Both props were eventually used in enacting scenes from "The Man Who Loved Bears" and "Wolverine Country" -- episodes of *Marty Stouffer's Wild America*.

In other cases, children found it necessary to use new sign systems to invent dialogue, props, and actions for the characters encountered through art. Christopher's enactment of the workman's role in Example 7 is one such instance. Here his knowledge of *Monster Road Builders* (Royston, 1989) and other books depicting workers and machines, his real life experiences with workmen, and the props he selected all influenced the way he portrayed the characters. The selection of the toy phone as a prop served as a sign which was woven into the play in context-appropriate ways.

The need to move from reading to dramatic play also encouraged children to borrow from other texts. For example, when playing *The Three Little Pigs*, Marshall took for himself the role of brickseller to the pigs (3/10, FN: School). He circled the playhouse holding his hands outstretched to showcase his wares and calling out in a sing song voice, "Bricks. Bricks for Sale!" Here his movement from text and illustrations to drama required him to flesh out a role that was minimally developed in the versions of the nursery tale we had read. To bring his part to life, he made connections to the actions, dialogue, and intonation used by the peddler in *Caps for Sale* (Slobodkina, 1940) -- a book we had recently read at school.

In considering the role of transmediation in the children's literacy learning, I draw upon semiotic perspectives (Eco, 1976; Siegel, 1985) that suggest that the expression of meanings in new sign systems creates anomalies, and anomalies motivate a shift of stance from understanding to reflecting on and reorganizing knowledge through the lens of the new sign system. Siegel (1985) argues that transmediation differs from other instances of semiosis in that the readers' interpretation "becomes an object of thought to be conveyed in a new expression plane" (p. 21). In this study, children frequently shifted stances from playing books to reflecting on book content and on ways to express it in play. While many of these shifts of stance were brief, some led children to lengthy periods of exploration and constructive play. Christopher's invention of props representing snow shoes and a husky sled in order to portray Marty Stouffer is one such example. The construction of snowshoes required Christopher to reconsider which characteristics were most central to snowshoes and how to portray them with available resources. Though housesshoes with paint stirrers taped to the bottom might seem like an unlikely substitute for snowshoes, the props reflected careful reconsideration of his observations of snowshoes and how they work. In this instance, he chose to sign two essential features; snowshoes are footwear and they are designed with material extending beyond the outline of the foot.

Transmediation of meanings from books to the medium of dramatic play and back again was often a transformative experience. Play altered children's interpretation of books, often directing their attention to new aspects of the text. For example, during a play episode in the bathtub, Christopher identified one of his shampoo bottles as Mike Mulligan (9/18, FN: Home). As we played with the

"Mike" bottle, I used another one to portray Mary Anne, the steam shovel, and made her cry, "Boo Hoo, Boo Hoo." When Christopher asked me why she was crying, I explained that she was sad because no one wanted steam shovels to work anymore. On his next reading of *Mike Mulligan and His Steam Shovel* he noticed for the first time that Burton's (1939) illustration showed Mary Anne with her shovel drooping sadly and tears falling from her eyes. "She says, 'Boo Hoo, Boo Hoo!' he commented." On other occasions, reading created new potentials for children's play. Christopher's toy back hoe became Mary Anne, and his father's riding lawn mower became a husky sled.

Data from the studies reported here support the hypothesis that dramatic play encouraged children to shift to a more reflective stance to reconsider book meanings from the perspectives offered by new sign systems. Children were different readers after play and different players after reading. Once children began to explore book themes through the new sign systems offered by play, new meaning potentials were available, as well.

Social Interaction

A fifth property of the play observed in these studies was the type of social interaction involved. Children's play interactions ranged from *individual pretense to social/mutual play*, though the latter was common only with adult partners. Like most children of their age (cf., Bergen, 1989), the children participating in this study often engaged in *individual pretense*, that is, they enacted scenes by themselves. While such play has often been termed "solitary pretense" (Bergen, 1988; Johnson, Christie, and Yawkey, 1987; Rubin, Watson & Jambor, 1978), the use of this term is somewhat misleading in that it fails to recognize the non-participant roles of others in the play observed in this study. When children enacted scenes without the direct participation of others, they often sought out adults or children to serve an audience (rather than co-players) at some point in their play. Through conversation *about* their play they involved others in important ways. Christopher exhibited this pattern in Example 7 when he announced to the group that he was portraying the workman from *Monster Road Builders*. In their audience role, adults asked questions that required children to make their playscripts more explicit and to clarify connections to books and life experiences. My questioning of Christopher in Example 1 was typical. By asking him whether Mary Anne had a "potty", I exposed my own guess about the connection between the steam shovel and our bathroom.

In the exchanges that followed he not only verbally explained his perspective, but played out the scene to demonstrate how he had transformed the bathroom into Mary Anne's boiler.

Most *social* pretense involved supportive adults rather than peers – a commonly observed pattern for this age group (Johnson, Christie, & Yawkey, 1987). In the settings observed for these studies, adults usually played a supporting role in the playscripts devised by children. Children sometimes subcontracted with adults to play out specific scenes or aspects of scenes for, or with, them. For example, children sometimes requested that adults invent specific bits of dialogue for characters or prompted their adult partners to play a role in precisely specified ways. (See Example 4.) In both cases, children had developed their own notions about what kinds of help or support they needed from adults in order to move their play forward. In peer-play, children found coordination of a coherent play script difficult. Sociodramatic play begun with peers often moved to in parallel play where children engaged in related play scenes, enacted along side, rather than in conjunction with, one another.

More adult-directed play occurred in the second semester of the school-based study as the research/teaching team became interested in supporting book-to-play connections. Teachers began to more frequently make suggestions for book-related play. Ginger's suggestion that "we might wash some mittens, tomorrow, in some water" while reading the nursery rhyme, *The Three Little Kittens* was typical (1/9 VT: School).

We also began, on occasion, to initiate book-related play episodes and to recruit children to play with us. For example, while reading Brian Wildsmith's *Animal Games*, I suggested that Steve help me find toy animals like the ones pictured in the book. Once props were located, I prompted the play: "Let's see if you can make one [toy lion] bite its tail like that [as in the illustration]" (2/27, VT: School). Analysis of adult-controlled play episodes such as this provides an interesting contrast to those directed by children. In general, adult-directed play tended to stick closer to the book (i.e., to maintain close intertextual ties) and was more likely to attempt to engage children in reenacting key events from an entire book plot.

Scope

As the preceding section suggests, the scope of children's play varied from enactments of *parts of books to wholes*. Though much of the research related to the role of dramatic play in story comprehension has encouraged children's literal reenactment of entire book plots (e.g., Williamson & Silvern, 1991), in this study children were much more likely to reenact parts of books than wholes. At Walker school, and at my home, full-scale, sequential reenactment of story lines presented by books were rare as spontaneous child-initiated events. In fact, this type of reenactment was observed only when adults became involved in structuring and directing the course of play.

When left to their own devices, the 2- and 3-year-olds in this study played out specific parts of books that were of special interest to them rather than attempting to play out an entire story line. (See Examples 1, 3, 4, and 6). To use the vocabulary of drama, children divided both stories and information books into scenes (i.e., sets of events occurring in a single setting) and focused on playing out one scene or part of a scene at a time. It was not infrequent for children to replay the same scene more than once during the same play event or on subsequent days.

Theoretical Summary

The Literate Potentials of Book-Related Dramatic Play

As suggested by the review of literature at the beginning of this paper, a good deal of research has investigated the possibility that dramatic play helps children build general cognitive skills and strategies that they need in order to comprehend and remember written text. The present study does not, and was not designed to evaluate what might be called the "global linkage" hypothesis. However, it does suggest that in addition to any global cognitive linkages between dramatic play and literacy, children themselves create direct linkages between their book and play experiences. Further, the data collected here support the hypothesis that book-related dramatic play is much more than a *context* for literacy learning. For the children participating in this study, it appeared to be a part of the process of *comprehending* books, *expressing* one's reactions, *experiencing* books in affective and kinesthetic ways, *connecting* literacy and play events, and *participating* in literacy events. Using play as a medium, children expressed their responses to books. They used the whole-body medium of play to experience books and to enjoy a few moments in the imagined worlds they constructed as part of transactions with the author's text and illustrations. Book-related play served as a means of *inquiry*

and as a connecting link between the child's world and the adult one represented by books and the book-reading events in which they were embedded. Play provided a relatively risk free environment for exploration of an open, child-directed agenda, and an array possible tools for exploration and expression (e.g., the multiple sign systems associated with drama.)

Play as a Supportive Medium for Literacy Learning

Working from the data collected in these studies and the perspectives of sociocultural and semiotic theories of learning, I would suggest that there are a number of characteristics of the play observed here that may provide both motivation and opportunity for young children's literacy learning: connection, ownership, openness, flexibility, multiple sign systems, transmediation, and community.

Connection. Dramatic play provided important connections between books and the child's world. Both cognitive (e.g., Pearson, Hansen, & Gordon, 1979; Piaget & Inhelder, 1969) and semiotic theories (e.g., Peirce, 1966) of learning point to the need for learners to link present experiences to those they have had in the past. In this study, play appeared to be an important way that children made connections between books and their own experiences. These connections were bi-directional. Children not only brought imaginary characters into reading events but also incorporated books themes and information into their play. Both patterns provided connections to their familiar ways of understanding and exploring the world through pretense.

Ownership. Because the play in this study was largely child-initiated and directed, children usually retained ownership of play events. Child-directed play provided them with the opportunity to explore literacy in a child-controlled context. This allowed them to tailor play to their own purposes and interests, and dramatically lessened the problem of inappropriate matches between c[illegible] adults' purposes and goals for play. Thus, in episodes where children directed or were involved in negotiating the course of play with others, the possibility of making connections between books and life experiences was increased. Play provided a lens for exploring the relevance of books to one's life.

Flexibility. As the earlier discussion of the purposes for book-related play indicates, play was a flexible medium for learning about and from books. Children's uses of play ranged from responding to books to pursuing personal inquiries, with purposes being tailored to their interests,

expertise with a particular book, and the available resources. Children in this study seemed to rather easily coordinate decisions about perspectives, intertextual tying, sign systems, social interactions, and scope to achieve their purposes. Play appeared to be a natural resource for this group's learning and exploration of books and the world.

Openness. A defining characteristic of play is that it is free from rules imposed from the outside, and that any rules invented by participants can also be changed (Spodek & Saracho, 1988). While children sometimes engaged in literal level play that remained quite close to the text, most play also involved some aspects of invention. The openness of play gave children permission to make innovative connections between books and life experiences, and between knowledge domains. Play encouraged risk taking. Children could afford to experiment with their own interpretations of books, rather than being strictly bound by those of others. Within the context of play, they could afford to explore the aspects of books that were of the greatest personal interest.

Multiple Sign Systems. Play involved children in experiencing books simultaneously through multiple sign systems. Dramatic play involved the expression and interpretation of meanings through oral language, gesture, movement, props wardrobe, and set design. The use of multiple sign systems created a "lived-through" experience of books that was multisensory and in some ways much more concrete and real than the books themselves. Play shared with life the possibility of experiencing the movement of people and objects in three-dimensional space and time. As they touched objects and moved through space to enact play events, children were able to use their usual ways of experiencing the world. Multiple sign systems provided children with multiple avenues of accessing book events, and in so doing provided them with more possibilities for understanding and exploring the world of books.

Transmediation. Not only did play involve multiple sign systems, but it also involved transmediation. In play, children were required to invent ways of expressing book-related meanings in a new sign systems. Drama called for dialogue, actions, props, and so on -- elements which were at best only partially signed in the text and illustrations of picture books.

Eisner (1982) suggests that sign systems become lenses for viewing the world. They provide learners with access to the meaning potentials associated with those systems. Sign systems also

become habits of thought. Transmediation shakes not only the habits, but the knowledge learners have constructed. As Siegel (1985, 1995) suggests, the expression of meanings in a new system often demands that learners reconsider their initial meaning worlds as well. As children experienced books in new ways through play (i.e., the manipulation of props or a shift in one's physical perspective relative to another character) they recognized different potentials for meaning than when they read or talked about books. Thus, transmediation had the potential to expand children's book-related meanings both because it required them to examine what they knew, and because these examinations were conducted from the perspectives offered by new communication systems.

Community. A final characteristic of play that supported literacy learning was the way play was embedded in the social community of home and school. The children in these studies often engaged others in their play in the role audience, and sometimes as co-players. Even when children played alone, their dramatic enactments echoed their interactions with others. Talking with an audience about one's play, introduced new perspectives and socially rooted anomalies. Children found that parents, teachers, and peers did not necessarily interpret their actions as they had intended. Playing within a social community regularly required children to shift stances from playing to explaining their play, and in so doing , to examine its content and form. Thus, both community and transmediation appeared to motivate children to adopt a metacognitive stance and to reorganize their understandings of books.

Community had another function as well. It was community that created boundaries for children's imagination and inventions. Because children often wanted to involve others in their play, they were required to bring their inventions and transformations into the range of understanding and experience of those with whom they played. While the openness of play might be seen as a centrifugal force driving children's play outward toward unconventional use of signs and idiosyncratic meaning, community served as the centripetal force that pulled them back inward toward conventional uses of signs and the formation of shared understandings.

Implications

In this paper I have presented the data-based patterns that led me to hypothesize that book-related dramatic play served an important function as part of the literacy learning processes of the

children with whom I worked. What is difficult to convey, however, is the extent to which play was embedded in the children's actions and interactions. Play lurked beneath the surface of most events, and was likely to bubble up to the surface at any time. It appeared as an irrepressible force in the children's exploration of the world of books. Not even our most reality-oriented, adult efforts at focusing attention on analytic book discussions could persuade these young children to entirely abandon it. Instead, they often took their play underground. While adults read and talked *about* books, children continued their play quietly on the fringes of the book-reading group, or simply left the book center to engage in book-related dramatic play elsewhere in the classroom. It appears that the children in these studies had a strong need to link play and books, and searched out arenas that allowed it.

Because emergent literacy research (see Sulzby & Teale, 1991 for a review) supports the purposefulness and playfulness of young children's unconventional literacy activities, I find this pattern as impressive as any of the others detailed in the paper. That is, since the children participating in these studies seemed naturally inclined to connect books and play, then as a researcher and teacher, it seems important to better understand why and how they do so. Previous work by educators interested in the play/literacy connection has sensitized the field to the potentials of pretending to read or write for children's exploration of literacy *purposes and processes*. This study highlights the possibility that children may also use dramatic play as a means of exploring the *content* of books.

Given the both the potentials and tenacious character of the book-related play reported here, I would suggest future research needs to describe and examine the role of book-related dramatic play for children of other ages, and other home and school backgrounds. Many questions arise: Does book-related play occur in other homes and classrooms? If so, what are the characteristics of these settings? Are the properties of play events identified here helpful for understanding events occurring in other contexts, and in what ways must they be revised to accommodate new settings? What is the relation between specific properties of play events and the literacy learning and comprehension? Is this kind of play only important for the literacy learning of very young children, or do older children also engage in this or other kinds of playful explorations of the world of books?

While any curricular implications of this research must remain extremely tentative, this study has had two important impacts on my work as a teacher of young children -- each of which might serve as a beginning point for other educators. First, these studies have added a new facet to the lenses I and my colleagues use when observing classroom literacy activities. We are now more attentive to the ways children introduce dramatic play into literacy activities. This has allowed us to value book-related dramatic play in new ways. Second, we are exploring the ways that classroom environments and adult responses to children support and constrain child-initiated, book-related play. We are examining the implicit messages about play sent through our curricular invitations and interactions. For me, this study prompts consideration of the ways in which we, as educators, both consciously and unconsciously attempt to connect and disconnect play from reading and writing events, and suggests the need to observe more closely how our perspectives on literacy events may vary from those of children. There is much yet to learn from the children concerning the literate potentials of book-related dramatic play.

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